

Useful Kinks for the Motorist

Double Purpose Light Switch and Other New Ideas

MODERN automobiles are built so close to the ground that it is no longer easy to crawl underneath them to do any necessary repair work. Of course, it is easy enough to jack up either the front or rear wheels to make it easier to work under the car, but there always is the possibility that the jack mechanism will break or that the car will roll off the jack in response to a sudden pull with a wrench or other tool applied to some part of the chassis. Wooden blocks made up as shown in Fig. 1 will eliminate both these possibilities and also save time. It is desirable to hinge the tapering ends so that they can be swung around out of the way after the car has been run up on the blocks. This arrangement will give you more room and make it easier to move around.

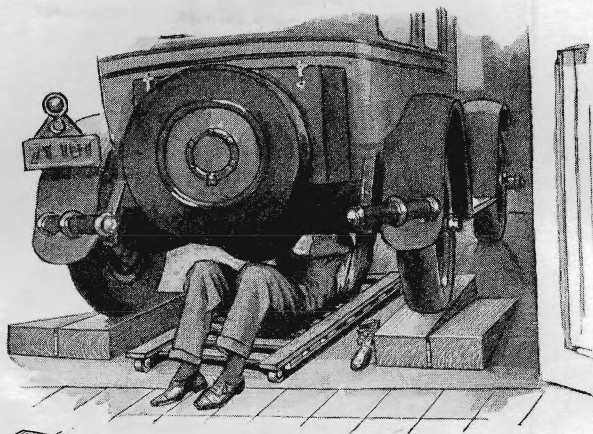
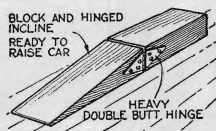


Fig. 1. By using wooden blocks you can get more space in which to work under your car and eliminate the danger of the car rolling off the jack. Cutting the blocks at the incline and hinging them facilitates moving around

Two-Purpose Light Switch

A NOVEL switch arrangement that can be used for two purposes is shown in Fig. 2. The switch is mounted on a small block placed just in front of the gear shift lever. In the drawing the size of the switch has been exaggerated to show the construction more clearly. The switch should be mounted so that the gear lever will push in the block to which the switch spring is attached only when the gear shift lever is moved to the left and forward, in which position the gears are in reverse on all new cars. The switch can be wired in parallel to the regular stop light switch so that the stop light will be lighted at all times when the car is in reverse. Or if you have to back your automobile out of a long driveway in the night time, you can fit a small spot light on the back of your car and wire it by way of this switch to the storage battery or the ammeter. Then when you push the lever into reverse in

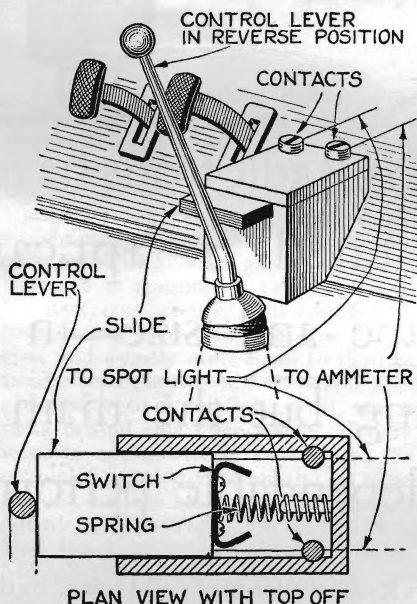


Fig. 2. A switch like this can be wired to turn on a spot light fastened to the back of the car so that you can see your way when backing

Ten Dollars for an Idea!

RICHARD GRAUER, of Austin, Minn., is the winner of the \$10 prize this month for his suggestion of the novel two-purpose light switch that is shown in Fig. 2. Each month **POPULAR SCIENCE MONTHLY** awards \$10, in addition to the regular space rates, for the best suggestion for motorists sent in by any reader. Other contributions that are published on this page are paid for at the usual rates.

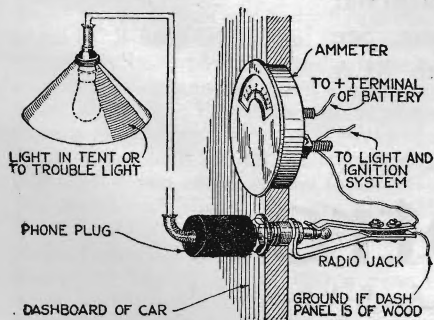


Fig. 3. On modern cars with indirectly lighted instrument panels, a radio jack and plug will prove useful for connecting up a trouble or camp light

order to back at night, the light will show you the way.

Jack for Extra Light

THE usual method of connecting up a trouble light is to plug it into the dash-light socket in place of the dash-light bulb, but with so many of the new cars fitted with panels that are indirectly lighted, this method is no longer practical. Of course, you can fit a metal spring clip to each of the two wires from the trouble light, but it is a nuisance to locate the proper points in the wiring each time you want to use the light. A simple solution of this problem is to fit to the panel an ordinary open-circuit jack such as is used for the loudspeaker of a radio receiver and then fit a regular loudspeaker plug to the end of the trouble cord. This arrangement, as shown in Fig. 3, is particularly handy if the extra light happens to be a light for your tent when camping.

When the Axle Breaks

WHEN the axle breaks on many types of cars it is impossible to tow them because the broken axle works out of the housing. If the break is close to the differential gear, the axle will support the wheel so that it will run true enough to tow the car if the device pictured in Fig. 4 is used. A wooden bar of two-by-four-inch cross section is placed as shown and wired to the rear end of the running board and to the rear end of the rear spring. A hole large enough to accommodate the end of the axle should be bored in the wooden bar. Of course extra strain is imposed on several parts of the rear axle assembly, so the car should be towed slowly and carefully, especially around corners.

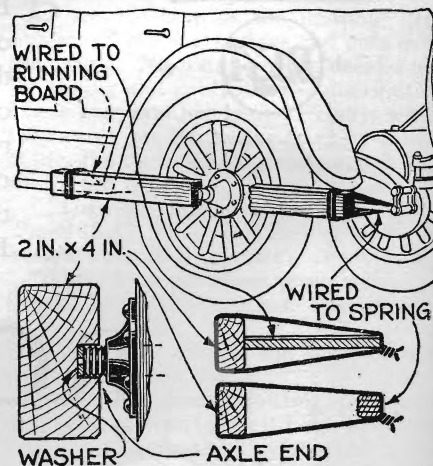


Fig. 4. Provided the axle is not broken too near the wheel, you can tow your car to the repair station by using a wooden bar as shown above